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Grain

JANUARY, 1946

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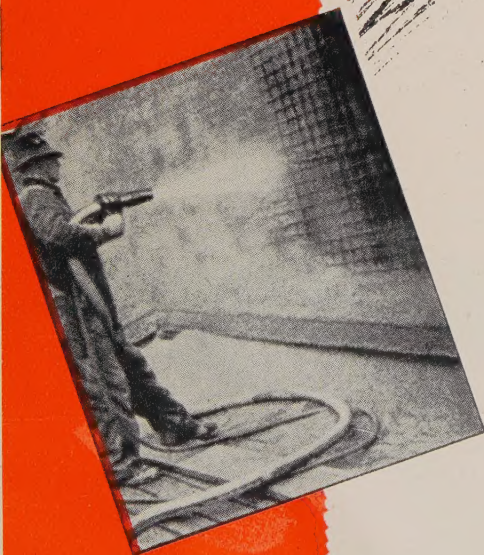


SUPERINTENDENT WILLIAM H. GASSLER SAYS:

"As far as we can determine at this time, the workmanship and materials used on our Calumet Elevator in 1939 have proven quite satisfactory."

Caulking operations are shown in the center view; at the left the walls are being prepared for our elastic *Surfacite*—which is shown being applied in the view on the right.

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You, too, will PREFER our services after we have gone over your problems, submitted facts, ideas and costs.

JOHN D. BOLTON & COMPANY
GUNITE CONTRACTOR

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CHICAGO, ILLINOIS

The Way I Look Toward The Future of the Grain Business

WHAT is known as the Grain Trade had its beginning in 1848. It starts with the producer and ends with the consumer. Its record is a passport to the future.

Without publicity or fanfare, the Trade has performed the gigantic service of assembling, shipping, processing and distributing at the lowest cost for any other commodity handled in the United States. And this record of low costs has been maintained in good times and bad—in war and peace. It is more important now than ever before, with our national debt mounting to astronomical figures, that we continue our leadership in low cost service.

Another credit mark is due to a great majority of the Grain Trade. That majority has never faltered or shirked payment of taxes in full on all its net profits. The Government needs the money now to care for its soldiers wounded and maimed, and needed it in the immediate past to care for those fighting in the hell holes of war that we stay-at-homes might live and the Republic continue to exist.

Up in the Air

THE Grain Trade as a whole is still a little "up in the air." We hear a lot about giving the green light to industry—about the American way—the return of private enterprise—free markets—price control—socializing the grain business—and "back to normalcy."

Now this "back to normalcy" is a misleading phrase. "Letting well

enough alone" is not the motto of the Grain Trade. We're going ahead—taking with us the practical business and economic ideas of the past—adding to them the newer and better methods that we have found and are finding along the way. This is progress. And we've got to live in the future—not in the past. We've taken our ox yokes and our buggies—stored

LELAND C. MILLER, President of the Western Grain & Feed Ass'n and Manager of the Federal-North Iowa Grain Co. at Cedar Rapids, says: "We've Got to Live in the Future—Not in the Past. . . . Pressure Groups in Washington Are 'Treasonous'—Over 12,500,000 Are Interested in Grain in One Way or Another. . . . Grain Surpluses of the Past Have Caused Depressions, So Let's Find New Outlets. . . . As a Major Part of the Food Industry, We Will Continue Our Scientific and Economic Efforts More Than Any Other Business in the World. Our Slogan Is—'Don't Fear the Future, Build It!'"

them away in the world's garret with other second hand mechanisms and outmoded ideas.

12,500,000 Embraced

MANY people tell me that our government is now run by "pressure groups." I don't believe it, regardless of certain indications. The Grain Trade has never thought this "pressure group" business wise or patriotic. But the Trade is lacking neither in numbers, influence nor votes. I have seen figures indicating that there are some 12,500,000 voters directly interested in the production, handling, transporting, processing and merchandising of grain and beans. A large percentage of these voters live in the middle west.

You could not expect the immediate and enthusiastic support of the entire number—they are not organized for this purpose. But if the Grain Trade ever wanted a "pressure group" it could have the largest backing of any combine whose leaders now spend much of their time at the nation's

capitol. But why mention it? Much of this "pressure group" business as now conducted is not a democracy—it is blackmail—treason to the spirit of our institutions.

The Grain Trade has always been interested in the farm prices of grain. Low prices for the products of the farm are never good for general business conditions. During the last 30 years there have been so many fantastic schemes to boost farm prices that "no one got nowhere," only in the direction of financial losses amounting to many million dollars. But now with the lifting of war controls the Grain Trade will make a practical effort along business lines to see that farmers receive a fair peace time market price for grain. And this will mean

better prices for other products of the farm.

A single idea at times has done much for our social and economic betterment. I well remember an idea that was talked about several years ago but never tried. Mr. J. L. Welsh is now showing us how this idea can be made to work. He is a grain dealer, was president of our Grain & Feed Dealers National Association, and is vice president of the Farm Crops Processing Corporation, now operating in Omaha. He has appeared before the Ways and Means Committee of the House of Representatives in Washington and submitted his plans and ideas that have to do with the manufacture of industrial alcohol.

Farmers Don't Want Dole

MR. WELSH says he has lived and worked with farmers all his life and that farmers do not want a subsidy or a dole. They want only a fair market price. The surpluses of grain have often caused business depres-

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sions. It is the one big farm problem.

Mr. Welsh's idea is that if a few hundred million bushels of grain are taken off the market each year, especially when there is a surplus, and used in the manufacture of industrial alcohol, for instance, our farm problem will be solved. We need the alcohol now. There are several hundred uses for it today and there will be a far greater demand in the years to come.

It's a mighty interesting topic. Write the Farm Crops Processing Corporation, Omaha, Nebraska, for a copy of the pamphlet on "Industrial Alcohol As a Solution to Our Farm Problem." This will give you the testimony of Mr. Welsh before the Congressional Committee in Washington. It is the finest and most practical statement that I have ever read having to do with the grain surplus problem. And the solving of this one problem in a business way will not only add strength and stability to agriculture, but to other important industries.

And now that a start has been made to solve the farm surplus problem, we should all do something about it. Let us not leave it to one or two men to do all the planning and all the work. Every producer, every grain

dealer at country station and terminal, every distributor and processor, should do a lot of boosting and furnish a lot of enthusiasm. That will encourage the men who have started the ball rolling.

The orderly and economic production and distribution of food is the greatest industry in the world. Man must eat. Food is the basis of civilization and orderly government. It is more important than all other problems combined. We are a major part of the food industry, and we will continue our efforts to make it more scientific and economic than any other business in the world. Our slogan is —Don't fear the future—build it!



"What percentage will you give me, Doctor, if I infect the whole neighborhood?"

ELECTRONICS PREVENT MOULDS

Cereal and grain products suffer heavy losses in humid atmospheres, according to Dr. William H. Cathcart, head of the Great Atlantic & Pacific Tea Co.'s national bakery laboratories. "When processors are able to protect their goods electronically, such losses are eliminated," he pointed out in announcing successful experiments in eradicating mould spores in freshly baked bread.

The Doctor estimates that mould damage to food products amounts to more than \$100,000,000 annually, which can hereafter be eliminated through high frequency sterilization requiring but five seconds treatment at 140° F. Bread so treated remained completely unaffected after three weeks under normal kitchen conditions.

In 1943 the Chicago SOGES Chapter put on an entire evening's demonstration on the application of high frequency rays to the treatment of infested grain and grain products, which some companies adopted shortly thereafter.

The man who gives in when he is wrong is a wise man, but the man who gives in when he is right is "married."

THE BEST MACHINERY AND EQUIPMENT WILL FUNCTION NO BETTER THAN THE SKILL AND WORKMANSHIP OF THOSE WHO INSTALLED IT.

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Free Enterprise

BY HENRY LIEFERANT, EDITOR, TRUE STORY

EVERY parent has had the experience of sitting down to help his small child with school work, and discovering that he himself may learn a number of new lessons therefrom. In any discussion of free enterprise, I am in the position of that school child. I am no expert, but I do know a few fundamentals which I would like to share with you.

The word "free" is fairly well understood by Americans. Being free is being exempt from undue control, being independent of an arbitrary *external* power. We all know that freedom is a privilege. Do we realize, though, that it is also a responsibility?

We are free, for instance, to earn, purchase, and own a car, but we must also assume all responsibility for its upkeep and proper use. We may not run people down, travel beyond the speed limits devised for general safety, or drive through somebody's store front. Freedom, if improperly used, without regard for the rights of others, becomes license. The literal meaning of "enterprise" is venture, attempt, undertaking. Actually, the word "enterprise" implies an effort of a daring nature, a step involving, among other things, courage and energy, ambition, ingenuity, activity, faith.

Freedom of enterprise, therefore, grants you the right to engage in your individual venture, to make your individual effort, without subjection to another human being or groups of human beings. Unfortunately for some people, free enterprise has come to mean ruthlessness in business, dog-eat-dog methods, and cutthroat competition. These people are abusing the principles of free enterprise, causing many other people to condemn it. This is simply a misinterpretation by a class of people who lack understanding. Ignorance of the principles of free enterprise is no excuse for opposition to it. Too many people are passing judgment who know nothing about the subject.

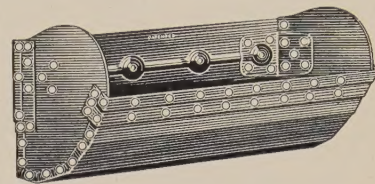
A PARABLE OF FREE ENTERPRISE: The system of free enterprise is one of the seeds from which these United States of America grew. Under this system we have, as a nation, gone farther economically, commercially, politically, and spiritually, than any other nation, and traveled the distance faster. It also is the seed of *future* growth for our country. It is the great equalizer, doing away with foreign distinction, giving to every American the same opportunity for growth. Bill Smith, Abe Cohen, and Mike Kelly may all become millionaires, and associate with other millionaires—if they wish to!

The system of free enterprise is embodied in the Constitution of the United States, which puts upon us the *responsibility* of freedom, then gives us the privilege of using our physical, mental, and spiritual resources to find our individual way of life. But free enterprise goes back a good deal further than our Constitution. You will find it expounded in The New Testament, in The Master's parable of the talents.

You remember the man "traveling into a far country, who called his own servants and delivered unto them his goods." To one, he gave the *responsibility* of five talents; to another, two talents; to another, one talent. He did not tell his servants precisely *how* to discharge the responsibility of using their talents. They were free to exercise their powers in their own way.

The first two servants, by using their talents, doubled them. The last man was afraid to make his own attempt, and he buried his, thus wasting both the money and his ability. To the first two men, *greater responsibilities and therefore greater privileges, were granted. The last one was deprived of even his small responsibility and therefore of the privileges that went with it.*

UNDER OTHER SYSTEMS: Of course, under free enterprise, we have had depressions. People have been underpaid, children exploited, and injustices per-



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petrated. But are conditions better in the countries where there is no free enterprise?

In those countries, the government is master, the people servants without initiative of their own. You cannot choose your job. You are put into one, and forbidden to quit or change. You may be sent to work a thousand miles from home, at a moment's notice, and ordered to leave your family behind.

You may not own any private property without permission of the government. Your time and activities are scheduled for you; your food, clothing, shelter, education, are all rationed to you. You cannot improve your living conditions, study for a profession, or even try to ennoble yourself spiritually, unless the official stamp is put upon you. If you did give up your job without permission, you would be shot or imprisoned. If you criticized your boss, which is the government, you'd meet the same fate.

It is scarcely necessary to point out how different our way of life is, how great the benefits to the individual under our system. Yes, freedom is an increasing privilege—and your and my increasing responsibility!

SEVENTH DAY OPERATION AND INSECT CONTROL

"Hasn't it occurred to you that the increase in mill insect trouble took place at the same time that full-time operation of flour mills got under way?" inquires a Millers' National Federation director.

"Seventh day operation of a flour mill has a good many serious shortcomings. It is tough on the working force, it is awfully expensive because of double time or time-and-a-half rates, it puts the sales department under pressure, it prevents repairs from being made and interferes with maintenance, it greatly increases fire hazards by standing in the way of normal cleanups, and along with these other delinquencies full-time operation prevents any kind of insect control from being really effective. No-

body can keep a mill clean more than a very short time if it is running all the while.

"In my opinion, it is considerably more than a coincidence that the past year or two have been the worst in milling history for insect trouble. The source of this trouble traces right back to our full-time plant operation." —MNF's *Hook-up*."

TREATING BOXCARS WITH DDT SOLUTION

We have received a number of inquiries about the proper method to employ a DDT solution in the treatment of freight cars. The following statement on that point has been prepared by Miss Betty Sullivan, chairman of the Millers' National Federation technical committee:

"A 5% solution of DDT in a light

mineral oil should be sprayed with a power spray on the sides, ceiling and floor of the car. Sufficient spray (about one quart) should be used to cover the surface without runoff. The car can then be lined and loaded.

"Such a treatment is an effective and cheap method of minimizing insect infestation of flour, feed or grain. The insects present on the surface of the wood or burrowed into it come in contact with the DDT residue and are killed.

"Reasonable precautions should be taken by the operator, and care should be exercised that no DDT comes in contact with the flour or feed."

This method is recommended when boxcars are to be treated. However, the treatment of boxcars with DDT solution is in no sense a substitute for other methods of insect control which are followed in every well-operated plant, warns the Federation.

S. HOWES FIRM HEAD DIES

Mrs. A. C. Barbeau, principal owner and head of the S. Howes Company of Silver Creek, N. Y., since the demise of her husband in 1937, passed away on December 18th. She is survived by a son, Alexis C. Barbeau, Jr., and a daughter, Mrs. Katherine Jenkins.

Mr. Stanley W. Watson, long General Manager of this widely known machinery and equipment firm catering to the grain handling and processing industry, continues in an expanded capacity.

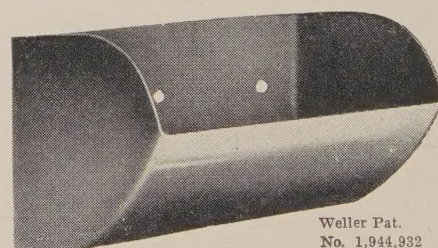


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GRAIN AND PRODUCTS BUSINESS TO GO TO TRUCKS IF WAGE AND RULE DEMANDS REQUIRE RATE BOOST

WAGE increases and rule changes demanded by twenty railroad unions, which have been the subject of conferences between employe and carrier representatives during the last two months, would add more than two billion dollars annually to railroad costs, would ruin the railroad industry, irreparably injure the national economy and set off a spiral of inflation which it has been the whole policy of the government to prevent, the carriers' spokesmen point out.

Increases in railway wages have a greater effect upon railway rates than wage increases have upon prices in other industries,—the cost of labor in the railway industry being about one-half of total costs which is a far greater percentage than in most other industries.

Nearly Twice the Net Income

COMPARED with the more than two billion dollar wage and rule demands of the operating and non-operating employes is the railroads' net railway operating income of \$1,106,000,000 in 1944 when freight and passenger traffic was at an all-time peak; also with the railroads' total payroll last year of \$3,853,000,000.

Freight rate boosts are an "imperative necessity" to meet already increased wage and material costs, but the demands of the Brotherhood of Locomotive Engineers and the Brotherhood of Railroad Trainmen for a wage hike of 25% with a minimum of \$50.00 per month, plus some forty-five changes in working rules, would alone multiply the needed rate hike painfully high.

Since 1941 the basic pay of railroad employes has been increased twice, resulting in an added payroll cost to the carriers in 1944 of \$785,000,000. To partially offset the first increase in 1941 the ICC granted a 10% increase in passenger fares and an increase averaging approximately 4.7% in freight rates. The freight rate increase, however, was suspended in 1943, after having been in force a little more than fourteen months, and has not since been restored.

Would Boost Cost of Everything Else

HIGHER rates will increase the cost of transportation which is a part of the cost of almost every commodity consumed in the country. Therefore in the last analysis the great mass of consumers must pay in one form or another these increased wages which will be reflected in the necessarily higher freight rates, the carriers contend.

It is just that there should be some freight rate increase when one considers how other prices have gone up since 1939 while freight rates have not, yet when rates get beyond a reasonable amount to restore that relationship it raises questions of tremendous seriousness in our national economy.

Blocking progress toward a settlement of the wage issue is the insistence of some of the operating brotherhoods on more than half a hundred other changes in rules which alone would cost the carriers over three-quarters of a billion dollars annually.

Two Hours Pay for Watch Inspection

"THE rules proposed by the brotherhoods," said the railroads' spokesmen, "range from demands for two hours' pay for the employes' time in having their watches inspected, to arbitrarily limiting the length of freight trains to seventy cars and passenger trains to fourteen cars. The rule changes sought are mostly in the 'featherbed' category, destructive of efficiency and deviously designed to produce more pay. The employees' proposal to limit freight trains to 3,000 feet, for example, would compel the operation of 180,635,194 additional train-miles per year at an annual direct cost of \$295,907,521. Compliance with the double-header rule would cost the railroads between \$13,704,056 and \$24,000,000.

"True, the rule demands were made before the end of the war while rigid wage stabilization regulations were in effect and were admittedly intended to circumvent the government's inflation controls. Yet we know of no other industry that pays an employee more than once for doing a job. The railroads, like other businesses, should pay their employees only once for each hour worked."

Railroad employees who do a wide variety of tasks ranging from common labor to jobs requiring a high degree of skill make 25% more in annual earnings than do the employees in all other industries reporting to the Department of Commerce, based on the figures for 1944 which are the last ones available.

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A Million Children

The school taxes paid by railroads enable more than a million children to go to school. In many rural areas they constitute half of all the school funds.

And this aid to education is only one of many ways in which the public benefits by railroad taxes. For these are *real* taxes—general taxes on railroad-owned property which go toward the support of public health, public safety, national defense, maintenance of the courts, and all other government activities and services.

No part of railroad taxes goes

for building and upkeep of railroad tracks. The railroads do that themselves and, in addition, pay taxes on their tracks and other property, thus helping to build and maintain the highways, airways, and waterways used by other forms of commercial transportation which compete with the railroads for traffic.

It is a matter of pride with the railroads that they not only pay their own way as transportation companies but also are able to help in the education of American boys and girls each year.

AMERICAN RAILROADS

TWO TEXTS WORTH READING

"THE FOREMAN AND THE VETERAN" is a small digest-sized manual for foremen, supervisors and department heads that is unique in several respects. It is the first manual that gives concrete suggestions on handling the various situations arising in foreman-veteran relations. It is the only manual on this subject written with intimate knowledge of both veterans and foremen.

The following contents of this manual by chapters reveals its unusually practical nature: An Opportunity for You; Three Types of Veterans; Six Changes You Need to Watch For; Six Traits You Can Profit From; Some Facts about Psycho-neurosis; The First Impression; The Follow-up; Counselling the Veteran Worker. There are four memo pages in the back to enable the foreman to keep track of the vets in his department.

The author, Ex-Sgt. Ted Handelman, was an army correspondent and writer for The Stars and Stripes, the army newspaper. In civilian life he is an industrial relations expert. Also by the same author is "WHAT'S AHEAD FOR THE VETERAN?", a pocket-size folder for the veteran. It was written by Mr. Handelman out of the conviction that most veteran-orientation programs miss this vital point:—the vet himself must be told what he needs to do for successful readjustment.

He speaks to his fellow veterans as an ex-G.I., discussing: Our Liabilities as Servicemen; Our Assets; Getting Up to Date on Work Methods; Becoming a Skilled Worker, etc. Also included is an outline of the vet's legal rights and benefits, sources to contact for detailed information, a list of important records to be kept, and other useful data.

Together, these two booklets constitute an effective, inexpensive program for every company employing veterans. They are very obviously written by a man who knows what he's talking about. His factual, realistic approach and specific recommendations are in welcome contrast to the windy generalizations so often found in writings on this subject.

"The Foreman and the Veteran," by Ted Handelman, 32 pages, hard paper cover; 25c each, subject to quantity discount; and "What's Ahead for the Veteran," by Ted Handelman, 22 pages, hard paper cover, 15c each, subject to quantity discount, from National Foremen's Institute, Inc., Deep River, Conn.

Have Organized Program For Hiring Vets

To aid veterans in returning to civilian employment and to gain the greatest benefits for themselves from the fine pool of workers created by the discharge of millions of service men and women, employers should have organized programs for hiring veterans and assisting them in finding the right job in their establishments, states Perry Faulkner, Chief of the Veterans Employment Service of the USES.

How to establish the kind of a program which will be of the greatest assistance to veterans is outlined in an Employers' Guide now being distributed through local offices of the USES and the state offices of the Veterans Employment Service representatives.

"It is of the utmost importance that employers who have not developed organized veterans' programs adopt such programs at once. Veterans are returning home by the millions and jobs must be found for them as promptly as possible. By calling at USES offices and listing all their job openings and particularly their high quality jobs, employers will be doing themselves as well as the veteran a real service."

WANT TO WORK OUT OWN DESTINIES

"The spirit of America is the spirit of independence," President Truman says in a foreword to the pamphlet. "Americans are typified by our fighting men: they seek no favors; they ask only for the right to make their own way. They want only one assurance, the right to work out their own destiny. They deserve that right and we are determined that they shall have it. Government alone cannot do the job—private industry must co-operate. By pooling the vast resources of our country, we can make it possible for every returning service man and service woman to find a job. They do not want a dole. They ask only the right to continue and improve our American standards of living."

ALL MUST ASSUME THEIR FULL RESPONSIBILITY

"To meet the total problem of jobs for veterans, all employers of workers and every individual must assume

their full responsibility," reads a combined statement issued by Eric A. Johnston, President of the Chamber of Commerce of the United States, Robert R. Wason, President of the National Association of Manufacturers, and Paul G. Hoffman, National Chairman, Committee for Economic Development. "An adequately planned veterans' program for employer groups is the goal of all American industry. To this program we pledge our full aid and support."

The Guide contains examples of successful veteran employment programs now in force, a list of aids which employers can obtain from the USES and a description of the services which the VES and the USES offer veterans and employers. Copies are available at all USES offices, and at the Veterans Employment Service, U. S. Department of Labor, Washington 25, D. C.

LABOR DEPARTMENT'S ARTICLE SIX

The skill and strength of our industrial workers must be guarded against accidents and diseases so as to carry through with much needed production. With this end in view the Secretary of Labor's committee to conserve manpower has compiled a list of do's and don'ts to keep workers from getting hurt. This is the sixth of a series of articles prepared by the U. S. Department of Labor so that all workers can check the hazards applying to their own jobs and safeguard life and limb in their own interest and that of post-war production.

Material Handling and Storing

1. Learn to lift the right way. Keep the body upright; lift with the leg muscles and not with the back. Do not try to lift too much. Get help if necessary.
2. Wear hand pads or gloves when handling sharp-edged scrap or rough material.
3. Remove all projecting nails from barrels, crates, and all other

MAKING YOUR WISHES COME TRUE . . .

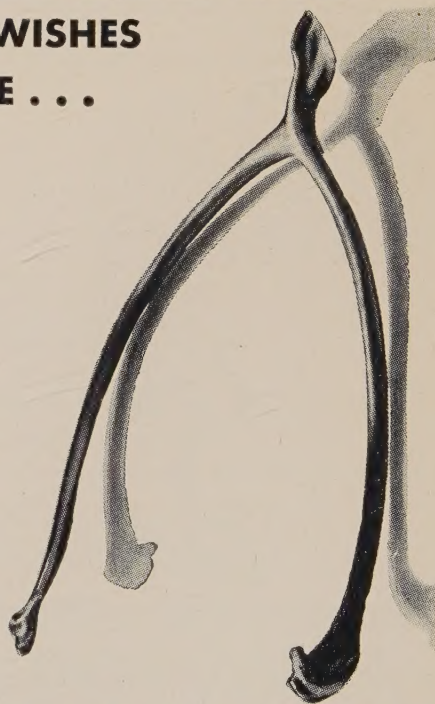
One wish has been fulfilled. Won by 3½ years of deadly struggle. With God's help, we have prevailed.

Now we have a chance to make another wish come true. For most of us, the outlook is a bright one. If we will simply use the brains, the will, the energy, the enterprise...the materials and resources...with which we won our war, we can't fail to win the peace and to make this the richest, happiest land the world has known.

Your wishes have been wrapped in that bright outlook. Your wish for a cottage by a lake. For your boy's college education. For a trip you long to take. For a "cushion" against emergencies and unforeseen needs.

You can make those wishes come true by buying bonds today...buying them regularly...and holding on to them in spite of all temptation.

There's no safer, surer investment in



the world. You can count on getting back \$4 for every \$3 you put in—as surely as you can count on being a day older tomorrow.

So why not be patriotic and smart at the same time?

FULFILL YOUR WISH—BUY EXTRA BONDS IN THE GREAT VICTORY LOAN!

places where they might cause accidents.

4. Keep floors clean. Oil or water is especially dangerous on floors near machines, near sharp-edged tools or materials.

5. Do not use gasoline or other inflammable substances in a closed room or near an open flame or on a hot surface.

6. All oils, paints and other inflammable or explosive substances should be stored in specially provided safety containers, and only small quantities of such materials (never more than a day's supply) should be taken into the workroom at one time. Containers for inflammable substances should be marked with proper identification and never used for any other purpose.

7. Arrange materials carefully and securely. Do not pile or place objects or materials near machines or in such a position that they can fall over or block passageways.

8. When piling materials, do not leave projecting edges or points against which someone may strike.

9. Put all scraps and waste materials into proper receptacles. Keep oily and paint-covered rags in closed metal containers.

10. Keep all aisles and exits clear.

HOOK SLIPS

The hook on a boatswain's chair disengaged from the eye of the sling and an employee fell about 60 ft. His upper right leg was fractured, and his left foot was broken.



Remedy: Instructions were given to the foreman to have the hook lashed or use a safety hook, and where practicable safety belts will hereafter be worn when using the boatswain's chairs and be securely fastened to the supporting tackle.

Math Prof: "If there are 48 states in the Union, and superheated steam equals the distance from Bombay to Paris, what is my age?"

Frosh: "Forty-four sir."

Prof: "Correct, and how did you prove that?"

Frosh: "Well, I have a brother who is 22 and is only half nuts."

SPITTING IN THE FISH BOWL

WHENEVER I observe people taking unnecessary chances at the risk of bodily injury to themselves, I am reminded of a story. It is about a lad named Melvin who had a penchant for doing things which he knew would eventually get him into trouble.

One day he was playing in the living room. His mother was in the kitchen. Finally, after an unusually long period of ominous silence in the vicinity of the living room, his mother called to him.

"Melvin! Melvin!"

"What, Ma?"

"Are you spitting in the fish bowl?"

"No, Ma, but I'm comin' pretty close."

Too Many of Us Are Melvins

CONSIDER Melvin's act of seeing how close he could come to his target without actually hitting it and you have the only reason for telling this story. It illustrates perfectly the attitude of many grownups in matters of safety.

Why does a man perform a chipping or grinding operation without goggles to protect his eyes? Why does an electrician attempt to work on a high voltage wire before making sure it is dead? Why do people smoke in the presence of highly combustible or explosive materials?

Why does mother set things on basement stairs for her or some other member of the household to fall over? Why does she stand on a wet basement floor and reach for a light socket when plugging in the washer?

Miss Is As Good As a Mile

IT CAN'T be that they do not know better. No, it isn't that. Like Melvin, who reasoned that he was perfectly safe as long as he missed his target, they kept on taking chances. They reason, "I've done this many times before and was never hurt,"—until they have taken one chance too many. Injury records every year unfold a tragic story of death and disablement to thousands of people who knew better—but who took one more chance.

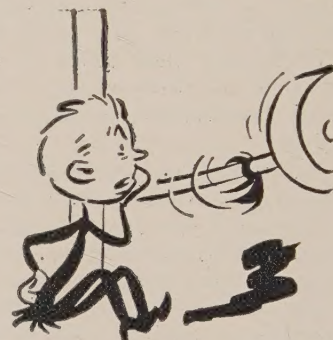
These are the types of accidents referred to as avoidable, and because they are **AVOIDABLE** they represent a total and absolute economic waste. Moreover, it is the avoidable accident which is the greatest threat

to the security and economic stability of thousands of American families.

That puts it strictly up to us—does it not?—V. L. McMullen, The Clinton Co., Clinton, Ia.

REALLY WENT 'ROUND

An employee wearing loose fitting overalls brushed against a revolving shaft, which caught the slack in his clothing and twirled him around several times before ripping out the seat of his pants. He suffered severe bruises to his hips and back, and was lucky to come out of the ordeal alive.



NATIONAL SAFETY COUNCIL

Remedy: Guards should be provided for all revolving shafts. Foremen and safety inspectors used this incident as a means of impressing upon other workers the dangers of moving machinery and the importance of wearing snug-fitting clothing.

RAILROAD SIDINGS

By G. L. Rhys

BEFORE FOOD SECTION, NATIONAL SAFETY COUNCIL

The hazard of a railroad siding is one which is recognized by everyone and also one where constant familiarity tends to breed contempt. In the case of sidings within a plant, it is not often advisable to have a man continually on guard. It is often possible to use an automatic signal of some suitable type. One type of signal which is inexpensive is the klaxon or warning horn controlled by one appointed worker, so that on occasions when the track is used the employees will receive an adequate warning.

The danger of men coming around the building and stepping directly in front of the track can be avoided by building a small railing forcing them to step around the corner far enough to get a view of the track.

It is also important to maintain tracks in good condition. Quite often railway sidings do not receive the attention which is necessary to keep them in safe condition. The crew can be of valuable assistance in this respect by reporting to the maintenance department any repairing or cleaning up which needs attention.

The danger of employes catching their feet in switches can be to a large extent eliminated by equipping switches with proper guards.

There is also a hazard on loading docks along curved track. A low rail or a switch crew taking the curve too fast will endanger men working on the dock, should a car jump the track.

Many other hazards are incurred by men who work at loading or unloading cars. Men have their feet injured as the result of wheels of a switching tractor passing over them, the danger of spikes or wires and sacked commodities falling, and metal running boards or toeboards. These boards are sometimes nailed to the dock and the car so as to avoid slipping.

One railroad superintendent makes a suggestion that countersunk holes be drilled in the toeboard and that after the board is placed both could be dropped so as to keep the board from slipping. Brackets can also be placed on the undersides to avoid slipping of the board.

The same safety rules which tend to make your shipping department safer are also applicable to the men on the loading docks. Here again it is a matter of supervision and education, which to a large extent will cut down the accidents. An elaborate set of rules can be drawn up, but unless there is intelligent and constructive supervision, no definite accomplishment in the way of safety will result. It is often a wise idea to call the switch crew together and with them go over the hazards of the plant insofar as they are concerned.

MOVES OFFICE TO

FORT WILLIAM

The Day Company, widely known dust control system engineers and manufacturers of Minneapolis, Winnipeg, and Kansas City, announce the removal of their second-named office to Fort William. The change was made to consolidate offices and expanded shop facilities under one roof, enabling this progressive firm to render an improved service to both old and new customers. General Manager Clark A. McEvevey advises their new address is P.O. Box 70.

DAY DUAL-CLONE DUST COLLECTOR NOW available in BOLTED FLANGE

Construction (Design 2)

Completely prefabricated, riveted and soldered at the factory—requiring only assembling and bolting together at the companion flanges.

This construction permits more compact packing for shipment and easier handling for installation. It greatly simplifies inside installations—especially of larger sizes.

Patented DUAL-CLONE design assures low resistance, high separating efficiency, long life and compact installations. Continuous cyclonic air flow and internal skimmers give 2-stage separation and eliminate back pressure resulting from eddy currents.

CORRECT ENGINEERING

is one of the most important factors in a successful dust control system. DAY Engineering has been FIRST in dust control since 1881.

Let DAY Service Save You Money

The DAY organization has over 64 years' experience, competent men and MODERN facilities for designing, fabricating and installing complete dust control systems or ANY sheet metal work of 10 gauge or lighter—including spouting, piping, fittings, track shed dust suppressors, pneumatic dust and material car loaders, leg casings, steel hoppers, miscellaneous bins and tanks. Write us about your needs.



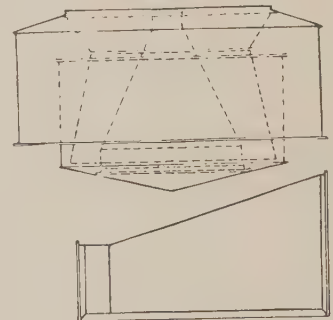
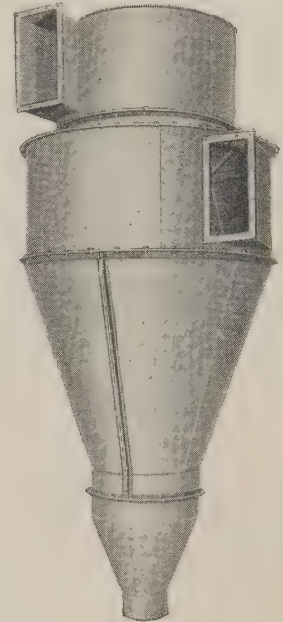
The DAY Company

THREE PLANTS TO SERVE YOU

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1820 Harrison St., Kansas City 8, Mo.

P. O. Box 70, Ft. William, Ont., Canada



Packed for shipping. The bonnet, stack and secondary cone nest inside the main body. The 2 halves of main cone nest together.

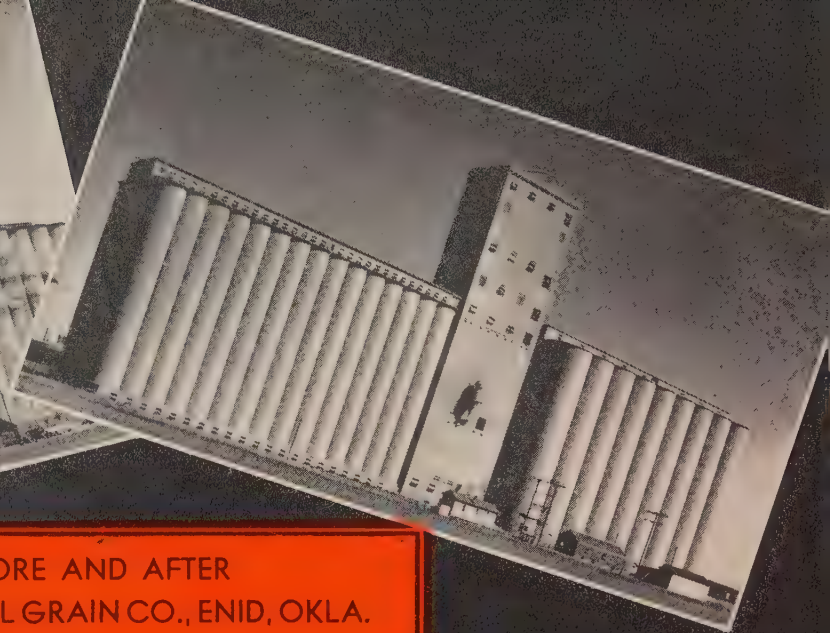
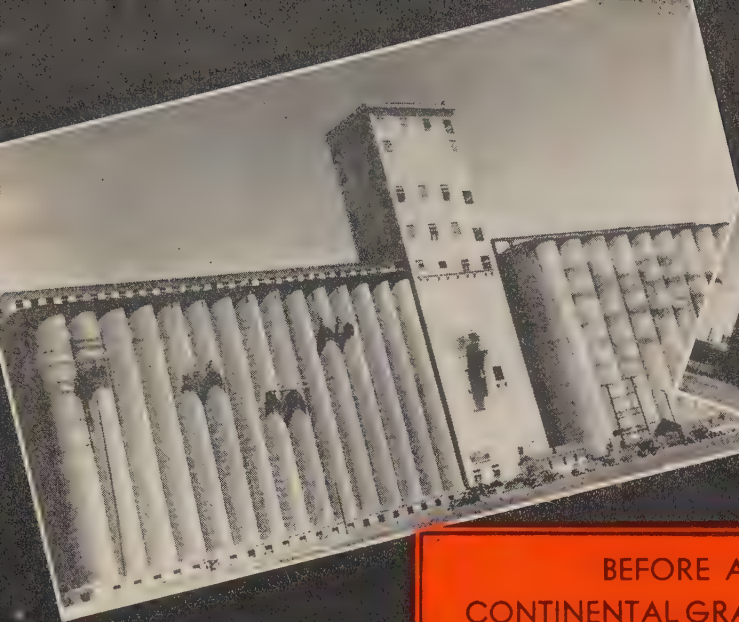
HIGH CAPACITY GRAIN CLEANING EQUIPMENT for TERMINAL ELEVATORS!

Hart-Carter normally offers a complete line of special, heavy-duty cleaners for terminal elevators. Included are the 2564 Carter Disc-Cylinder Separator, combining discs and cylinders; and the all-cylinder 45 Hart Uni-flow Grain Separator. These machines offer a profitable answer to whatever cleaning, grading, separating or processing jobs you may be called on to handle.

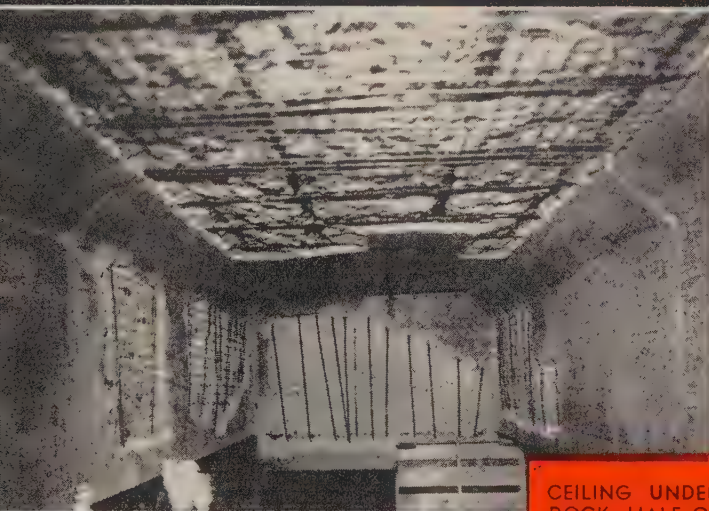
HART-CARTER COMPANY

670 Nineteenth Ave. N.E.

Minneapolis, Minn.



BEFORE AND AFTER
CONTINENTAL GRAIN CO., ENID, OKLA.



CEILING UNDER
DOCK; HALF OF
ONE UNIT; 798
UNITS.



GRAIN ELEVATOR,
DOCK AND WARE-
HOUSES, NOR-
FOLK, VIRGINIA.



MOORE-LOWRY FLOUR
MILLS, REA PATTERSON
BRANCH, COFFEYVILLE,
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SEE!

Here's what we mean when we say — Weatherproofing and Restoration jobs done by B. J. Many Company are *expertly* done . . . providing maximum protection against moisture and deterioration.

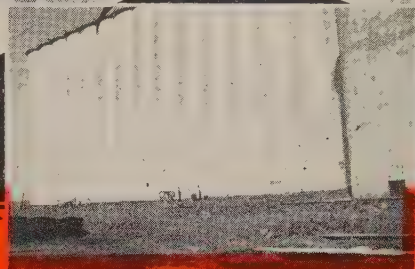
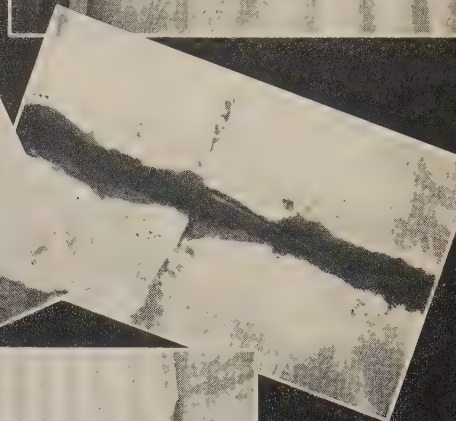
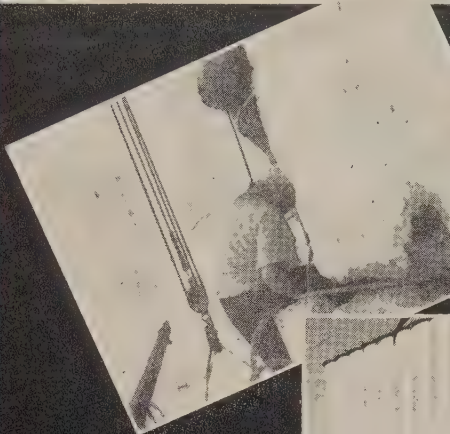
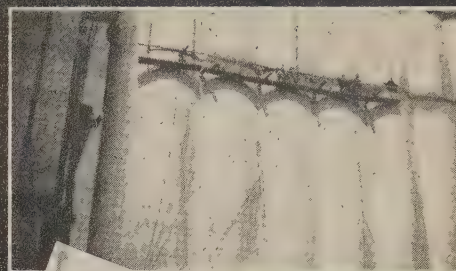
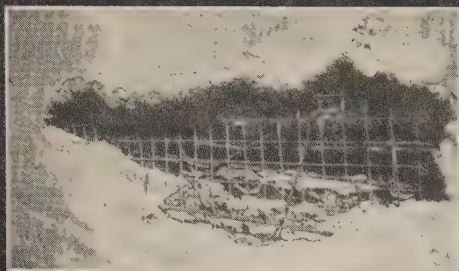
A B. J. Many Company job costs more; it's worth more; it lasts longer . . . and that's what counts. Cheap materials and faulty workmanship represent false economy.

Plan now for post war protection of your properties. Write

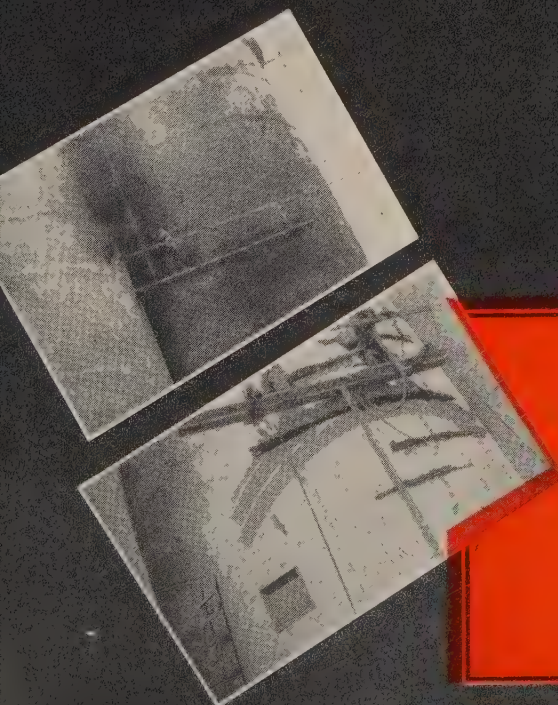
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SECURITY ELEVATOR CO.
HUTCHINSON, KANS.
VIEWS OF ELEVATOR B



SECURITY ELEVATOR CO.
HUTCHINSON, KANS.
VIEWS OF ELEVATOR C

UNLOADING 8-9-10-11 CARS AN HOUR — is common and continued experience with a RICHARDSON BOX CAR UNLOADER



Cuts costs of unloading—
Minimum power re-
quired.

Minimizes Labor Turn-
over.

Eliminates Overtime and
Night Shifts.

Prevents damage to Grain
Doors.

Avoids demurrage ex-
pense.

Unload your cars with
the Richardson Box Car
Unloader at three times
the speed at 1/5 the cost
of unloading by power
shovels.

In days of increased and mounting labor costs and the cry for more and more production, you can balance one against the other in your unloading operations by using a Richardson Box Car Unloader and handle more grain into the house at less cost and avoid tying up tracks with cars.

The Richardson Box Car Unloader is balanced on a knife-edge while unloading cars. Use this "knife-edge" to balance your production.

Write today for Catalog 2140-5 to

RICHARDSON SCALE COMPANY

Clifton, New Jersey

Chicago
Philadelphia

Minneapolis
San Francisco

Wichita
Atlanta

New York
Boston

Daily Safety Reminders

- 1 Always face a ladder when ascending or descending. Use both hands.
- 2 Do not leave anything on the floor that you or anyone else could trip over.
- 3 All wiring should be considered live and dangerous until the contrary has been proven.
- 4 Repair jobs and construction jobs must be well planned to be safe.
- 5 Trust a machine only when you control it.
- 6 It is not enough to put your best foot forward. Put it in a safe place every time you step.
- 7 Do not lay tools down where they may be stumbled over.
- 8 Good maintenance adds years to the life of a machine.
- 9 Learn to lift the right way. Keep the body upright; lift with the leg muscles, and not with the back.
- 10 Keep goggles clean and make sure they are sterilized frequently.
- 11 If your job requires special protective clothing, wear it continually for your own safety.
- 12 Find the safest way to do each job, then do it that way until it becomes a habit.
- 13 It is the little careless habits that cause the big accidents.
- 14 Make sure a ladder is not defective before using it.
- 15 For things electrical—call the electrician.
- 16 Watch out for splinters—splinters are so painful.
- 17 Good working habits are as easily formed as bad ones.
- 18 Safety is a prayer for protection from folly and carelessness.
- 19 He jests at scars who never felt a wound.
- 20 Keep from getting hurt by observing safety rules and instructions.
- 21 Keep goggles between your eyes and danger.
- 22 Do not board any car or engine while it is in motion. Never climb over or under cars.
- 23 Good housekeeping means simply good order and cleanliness.
- 24 Be thorough, half-way measures won't prevent accidents.
- 25 You may be a good provider, but you can't support yourself on a broken ladder.

- 26 Place ladders only against solid and stationary backing.
- 27 Report any hazardous conditions you find on your job.
- 28 It may make a difference through all eternity whether we do right or wrong today.
- 29 The fire danger is greatest at night. An efficient watchman knows his duties and performs them well.
- 30 The world is a looking glass and gives back to every man the reflection of his own face.
- 31 Transmission shafting in motion is a very grave danger to every workman who may come in contact with it. Keep a safe distance.

IMPRESSED BY EFFECTIVENESS

At our recent meeting of the Metropolitan Chapter of the American Society of Safety Engineers, held in New York City, a representative of the Eriez Mfg. Co., demonstrated their non-electric magnetic separator. I was very much impressed by the power and effectiveness of this device, having had quite some experience with magnetic separators as Fire Marshal and Safety Engineers of the Corn Products Refining Co. plant formerly located at Edgewater, N. J.



I realize what a value this would be in the prevention of dust explosions in the Grain Elevator Industry. Referring to the experiments being made by Mr. Emil Buelens of The Glidden Co. of Chicago, in which a new application for larger elevators is being tried out, it is my candid opinion that he will discover the Eriez non-electric separator to be the most efficient and safest on the market.

Having been interested in the prevention of dust explosions for the past 27 years, I deemed it worth while to write and inform you of my thought. — William F. Schaediger, SOGES Representative on NFPA Dust Explosion Hazards Committee, et al.

"We ought to pay more attention to the future. We ought to pay more attention to it than we do to the past, because every one of us is going to spend the rest of his life in it."—Charles F. Kettering.

NEW STAINLESS STEEL SURFACED MAGNETIC SEPARATOR DEVELOPED

THE successful development of a powerful, compact, non-electric separator with a working surface made entirely of stainless steel is announced by Eriez Manufacturing Company, Erie, Pa., one of the pioneers in the permanent magnet field. This announcement is of particular interest to handlers and processors of grain and either wet or dry grain by-products, as it offers a simple, sanitary, efficient means of removing hazardous, spark-producing iron and steel trash.

Processing of wet milled corn, brewers and distillers grains, soybeans, flaxseed, malt, mash and the many other moist or liquid grains and grain products, may now be afforded further magnetic protection at any point in their processing lines, regardless of moisture conditions.

Wider Applications Now Possible

DURING the past six months, Eriez stainless steel units have been given practical tests in various types of plants. In all cases they have successfully resisted rust and corrosion, and Eriez's representatives report the following advantages for the new stainless steel separators:

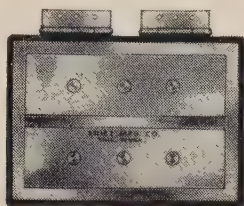
- (1) It can be used in liquid or moist materials, as well as dry;
- (2) It will stand up under strong foodstuffs, chemicals, acids, liquids, etc., that cannot come in contact with ordinary steel;
- (3) They are longer lasting, as stainless steel face resists abrasive wear better than ordinary steel;
- (4) It can be used on outdoor applications without danger of loss of efficiency because of weather, and
- (5) It eliminates possibility of rust scale getting into cereals, liquids, etc.

Installed at the beginning of grain handling lines, Eriez stainless steel magnets will eliminate fires caused by metal sparks; prevent damage to processing machinery, eliminate production delays and costly repairs.

No Wires Now

THESE stainless steel faced magnets can be made up quickly in any size desired. Light, economical units needing no wiring—power being furnished by Alnico steel magnet castings—these magnets are so made that their strength lasts indefinitely, according to the Eriez concern, which backs up its product with a 10-year unconditional service guarantee.

Full particulars on stainless steel magnets to separate damaging tramp iron objects from materials in legs,



The new stainless steel ERIEZ Separator illustrated here shows the side and center insulating strip in non-magnetic stainless steel. The two powerful pole surfaces on each side of the center insulating strip are made of magnetic stainless steel.

spouts, trippers, conveying units, hoppers, mixers, feed tables et al., in advance of expensive cleaning, conditioning and processing machinery, can be secured by writing for Bulletin 101 DM, Eriez Manufacturing Co., Erie, Pa.

1945 CARLOADINGS UP 8.5% AND 3.2%

Carloadings of grain and grain products during 1945 totaled 2,734,308, as compared with 2,520,733 in 1944, 2,648,308 in 1943, 2,185,022 in 1942, and 2,027,824 in 1941. This was an increase of 8.5% over the 1944 loadings, and 3.2% over the 1943 tonnage.

CARLOADINGS CONTINUE STRONG

Car loadings of grain and grain products during the current period continue strong, and were, for the weeks ending:

	1945	1944	1943
Dec. 15	54,513	44,678	48,573
Dec. 22	45,786	46,089	41,730

WORLD CORN PRODUCTION DROPS:

The world's 1945-46 corn production is estimated at about 5,050 million bu., or about 4% less than in 1944-45, according to the USDA's Office of Foreign Agricultural Relations. Production is estimated to be 7% greater, however, than the 1935-39 average.

Substantially smaller crops compared with the previous season are reported in North America and Europe, and a small decrease is indicated for Africa. The South American crop, now being harvested, is forecast at 30% above the poor 1944-45 crop but considerably smaller than average.

The Soviet Russian and Asiatic corn crops are estimated to be slightly larger than the year before, though smaller than average, but increases indicated in these areas are insufficient to offset the North American and European reductions.

The United States and Argentina were the principal sources of supply for corn during the war period. Both have smaller than normal exportable supplies of corn. Exports from the United States are expected to very limited, at least until the 1946-47 season, and normal export movement from Argentina is not expected to resume until the new crop becomes available in May-June.

Lower yields were the primary cause of the drop in the world's 1945-46 corn output. Smaller acreage was a factor in some important producing areas, notably in the United States, but increased plantings in South America and Europe, largely compensated for such declines, and there was little change in the net total of world acreage.

Dec. 29	34,886	36,087	40,689
	1946	1945	1944
Jan. 5	43,912	39,563	54,730
Jan. 12	54,453	46,687	57,442

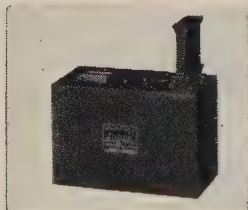
CORN GRIND UP

During December the eleven corn refiners ground 10,741,217 bu. for domestic consumption, a considerable increase over the previous month.

Here's about

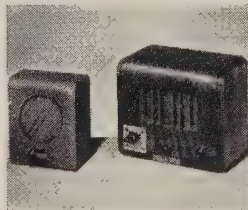
ALL YOU NEED

IN SUPPLIES AND EQUIPMENT
FOR SEED HOUSES, GRAIN ELEVATORS
AND COTTON GINS



STEINLITE

A one minute Moisture Tester. EASY TO USE... like tuning a radio. Operates on the radio frequency impedance principle, and is checked against official oven methods. Sold on 10-day trial basis. No money down. Immediate shipment. Standard Grain Unit, \$275.00. Special Models, \$325.00.



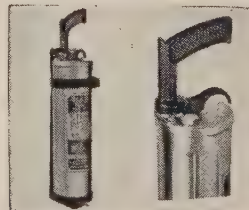
CALL-A-PHONE

Inter-office communication system. Saves time; speeds production. You can talk to one or up to five persons while they remain at their work. Personnel can contact you. Its value has been proven by its long list of satisfied users. Master station only \$34.00. Sub-stations, each \$12.50.



ELECTRIC BLOWER

Model 6A—Especially recommended for removing dry dust from machines and motors up to 20 h.p. Equipped with powerful 1/2 h.p. G.E. universal motor mounted on Norma ball bearings. No oiling. Easily converted into sprayer or industrial vacuum cleaner. Attachments extra. Price \$54.45. Other models.



"PISTOL-GRIP"

Shoots about thirty feet. Turn handle a half turn either way, pump a few strokes and pull the trigger. Liquid contains no water, alkali, or acid, and will not freeze. A non-conductor of electricity, and will not harm motors or machinery. Price—1 Qt. \$9.30, 1 1/2 Qt. \$11.30. Refill liquid .95 Qt., \$3.15 Gal.

OVER 400 ITEMS IN STOCK

Seedburo stocks over 400 different items of Equipment and Supplies. All are rigidly inspected and fully guaranteed. Government standards are strictly adhered to where available. The Seedburo 1945 Catalog and Reference book contains official directions for grading grain and other useful facts. If you do not have a copy, write today.

SEEDBURO
EQUIPMENT COMPANY

626 BROOKS BUILDING • CHICAGO 6, ILLINOIS

The Way We Do It

At The Lakehead

A General Description of a Canadian Terminal Grain Elevator, Plus the Functions of the Board of Grain Commissioners For Canada as They Concern a Terminal, Are Interestingly Told by a Past SOGES President Before the Canadian Pacific Railway Study Club. Not Only Will Many Readers Glean Profitable Pointers Therefrom, But Here is a Vivid Word Picture That Tells a Long Story of Interest to Many, Including Outsiders. Our Capable Author Prefers to Remain Anomymous.

THE elevator industry of the Fort William-Port Arthur district is a much more important one to the economy of this Dominion and to the Western producer than is realized in many circles, and therefore is a subject that might very well be made into an exhaustive one.

In thinking of the industry it should always be borne in mind that all elevators are operated under the supervision of the Board of Grain Commissioners for Canada, which Board consists of a Chairman and two Commissioners located in Winnipeg, and several Assistant Commissioners located strategically across Canada.

With the foregoing in mind it would seem timely to commence any discussion of elevator operation by drawing to your attention the salient points at which the Board's supervision enters into elevator operations. Firstly, all grain elevators are licensed and bonded by the Board.

The Board's functions falls into two main departments, i.e., Inspection Department and Weighing Department, the operations of which are designed to protect the growers and the trade as regards grades and weights. Of course, it is well-known too, that our two trans-continental railways have a vital interest in the work of the Weighing Department, because it is from the records produced by this department that the railway companies make up their freight charges on all grain carried.

Grain Commissioners Responsible for Both Weights and Grades

TO illustrate for you one of the more important services rendered by the Board's Inspection Department,

that of the establishment of grades, immediately after a train of grain has reached the Winnipeg yards samplers enter each car for the purpose of procuring an average sample of its entire contents.

A five foot brass probe slotted at four inch intervals is used for the job, which permits some grain to be lifted from different levels of a car. Six or seven probings are made in each car, and the samples thus procured may be considered to represent a fairly reliable average of a car's entire contents.

Imagine this operation being performed on 4,000 cars daily and then the magnitude of the Board's Inspection Department's services may be realized. But in the aggregate the sampling of farmers' grain represents only a minor part of that department's work.

After samples have been procured by the method already explained, they

are accumulated and placed in a room of even temperature and humidity to preserve the moisture content of each sample. Later the samples are trucked to the Board's main inspection offices where there are employed many qualified grain inspectors who proceed to give each sample its correct grade.

Grade Tickets On Winnipeg Inspections Are Made Up at Fort William

THE inspectors performing this work do so only with a car number as a guide to car ownership, so there can be no improper grading to favor or injure any owner. After grading, the samples are then given an official moisture test. Moisture content is an important factor in grain and must be known to give its true grade values.

After this, grades of the various cars which go to make up a complete train are then recorded on sheets which are sent to Fort William by fast mail to reach here prior to the arrival of the grain train, which ordinarily leaves Winnipeg soon after its cars have been sampled.

Upon receipt at Fort William by the Inspection Department's headquarters in the railway yard office, the above mentioned sheets provide the necessary information from which grade tickets for each car are made. The grade tickets are then attached to their respective cars upon arrival in the terminal.

We are all familiar, of course, with the part played at this stage by the railway companies. Elevator designation cards are made out from railway train sheets, which cards are also attached to their respective cars prior to the time they are shunted over the "hump" to elevator receiving tracks.



"I was just trying to knock some of the mud off of my fenders."

We have reached the stage where the cars of grain are placed on an elevator's tracks to be unloaded and it is at this stage the Board's Weighing Department enters into the picture.

"Weight Correctness" Checked by Visual Estimate

TWO representatives of this department commence at once to establish "weight correctness." One records seal numbers and examines cars for grain leaks, and the other opens car doors and makes a record of an estimated average of the height of grain contained in each car.

From such an estimated grain line, using tables and the weight per bushel of any given kind of grain, a fairly accurate estimation may be made of the total contents of a car of grain. It may also be said this method of estimation of a car's contents provides a very good check on the final weighing results.

Upon arrival of cars on an elevator's tracks an elevator employee lifts the grade tickets in order of unloading, and per track number sequence, which are then filed in the same order. Following this the Board's Weighing Department representative then adds

to each grade ticket his estimation of each car's grain line. This information is for the guidance of Board's weighman to be used as a check against the final weighing results of each car.

From the grade tickets an elevator man makes up unloading shunt-slips, which record every known particular of each car. He also adds, for the elevator weighman's information, the final distribution of each car.

Everyone is acquainted with the actual shoveling operation of a car of grain, but perhaps may not be so well acquainted with what else takes place at that time.

Automatic Sampler Tells All

WHILE a car of grain is in the course of being elevated, an automatic grain sampler is in operation which lifts approximately five grammes of each one hundred pounds of grain passing it. This automatic sampler is supervised by a representative of the Board's Inspection Department.

After a car has been completely elevated the sample so taken is divided by an instrument which performs such a division accurately. One half of each sample is used by the Board's inspector at the elevator and the other half is for an elevator's own use.

At this time the given Winnipeg grade of a car is thoroughly checked by the Board's inspector stationed at the elevator, and if any errors are found, they are then corrected.

The official unload samples, plus the inspector's record sheets, are sent daily to the main inspection office, where any grade changes made at the time of unloading are again checked and substantiated.

This most careful procedure gives the owners of all grain very conclusive and positive treatment as regards to true grade values. But, notwithstanding all of the above facts, every sample is kept on file for a

BLACK REXALL BELTING



For many years it has firmly held the No. 1 Position for heavy-duty legs.

THE REASONS:

17-1/2% Heavier Duck Base.

33-1/3% Greater Tensile than the 32-oz. duck used in competitive belts.

Maximum maintained flexibility.

Non-deteriorating treatment—no rubber.

High traction—more grain handled hourly.

ASK US FOR THE EVIDENCE

IMPERIAL BELTING COMPANY

1750 S. KILBOURN

CHICAGO 23



"Yes, a cat sure needs nine lives around one of these big elevators."

period of 30 days, during which time any owner may have his sample surveyed before a committee of impartial inspectors who are employed outside of the Board's jurisdiction.

We shall now pass from the administrative part of the operation of a terminal elevator, and endeavor to draw some pictures of various types of intricate operations which take place within a terminal elevator and some of the mechanical methods of control.

Signal Lights Are Interlocking

TO enable an elevator to keep cars intact as to grades and weights, a very efficient system of signal lights is installed, each unloading hopper having a number and a correspondingly numbered light. The latter are located on the scale floor and operate in connection with red and green signal lights from the trackshed floor to the scale floor, and vice versa.

The use of these signals in actual operation is, as follows: A shunt-slip covering any given car about to be elevated is sent to the scale floor showing into which hopper a car has been unloaded. When an elevator weighman is prepared to have a car sent up he presses his signal light-switch. Lights showing green at the

scale floor and red at the trackshed floor would thus be reversed, i.e., red at the scale floor and green at the trackshed floor.

This signal gives the trackshed foreman his orders to proceed to elevate. But before he commences to do so he presses the light button corresponding to the number of the hopper from which the car is to be elevated, and this definitely establishes for the elevator weighman the exact car in process of elevation.

One very important feature of the red and green signal light switches is that they are self-locking. In practice this means that no matter how much

the elevator weighman might wish to reverse his signal to the trackshed he cannot do so by pressing the switch button again, because the signal lights may only be reversed by pressing the switch button located at the opposite end of a circuit.

Interlocking Hopper Valves Prevent Mixing

THIS is an excellent feature because it causes workmen to remain vigilant and attentive to their work, and means there can be no escape from personal errors; neither can an erring workman pass the blame for his own errors on to any other workman.

The only way a correction of a signal light may be made is by telephone, with the request that the signal light be reversed. Then all operations would immediately cease until matters had been entirely and satisfactorily clarified.

This method of unloading grain by shunt-slips and signal lights avoids all possible telephonic errors and misunderstandings which might easily occur if men using telephones were not possessed of good telephone sense.

The system just described may perhaps sound complex in explanation, but in actual practice it is very simple and works most satisfactorily.

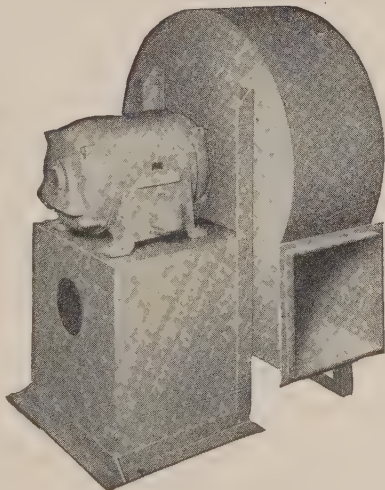


Desk Sergeant: "Guilty or not guilty?"
Murderess: "What else have you?"

"GENERAL" BLOWERS AND EXHAUSTERS

Improved designs of
all types for every

ELEVATOR AND MILL SERVICE



Steel Plate Exhauster

Steel Plate Blowers and Exhausters—

For air moving material handling.

Disc and Propeller Fans—

For ventilation and dust disposal.

Industrial Vacuum Cleaners—

For dust and spillage pick-up.

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In rotary and stationary styles.

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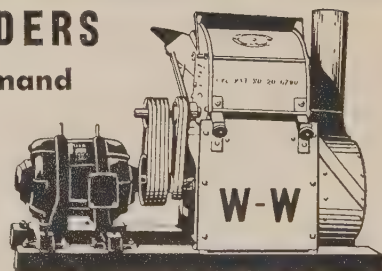
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For FAST GRINDING at Low Cost on Low Power

W-W GRINDERS

Meet Every Demand
of Large Users



Model F-22-M—15 to 25 hp.
18" feed opening for fast grinding.

The model illustrated is ideal for the small mill or for the many small, quick jobs not suited to your heavier equipment. From eleven modern models, you can select a W-W to best meet each need of your mill. Note these features of all models:

- Grind to any fineness or pulverize.
- Adaptable to dry, wet, greasy or stringy material.
- Exclusive and famous W-W Star Cylinder.
- Heavy, rigid cast frame, shaft, bearings—all built over-size according to horsepower requirements.
- Big feed openings for fast, easy work, up to 36" wide.
- Built for low power and low upkeep costs in relation to big capacity, and reasonably priced.
- Less friction, providing lower moisture loss, cooler grinding.

Use W-W equipment for bigger profits and satisfied customers in all grinding work. Write for literature on any type of grinding.

W-W GRINDER CORP., Dept. 319, Wichita, Kansas

Another feature which might well be mentioned is the fact that all hopper valves are connected to a separate lever and, no matter how many hoppers there may be in a line, only one lever can be opened at one time. This is because the opening of one lever automatically locks all other levers and thus safeguards against the mixing of grains of different classes which may be waiting in all hoppers to be elevated in turn. It also preserves intact the contents of each car which is important from the point of view of individual weights.

Cylinder Cleaner Revolutionized Grading

GRAIN cleaners and grain cleaning are also quite important in the matter of elevator operation. There are three main types of grain cleaners which may be classified as:

The screen machine which performs its work by eccentric motion, plus wind aspiration;

The disc machine which is a series of changeable indented discs—with indents sized to pick up one class of grain and reject another, and

The cylinder machine which con-

sists of four rows of cylinders, each row having a different size of indentation. Working in a similar fashion to the disc machine, the most important difference is that each row of cylinders may be adjusted to do various types of cleaning, and for various types of grain.

The latter type of machine is the latest innovation in grain cleaning equipment and has revolutionized the setting of grades in some classes of grain. The innovation of the cylinder machine has made it possible to "make" grades which before its entrance into elevator operation were unheard of. All of this has reacted most beneficially to the western producer.

Running of Grain Like Single-Track Railroading

RUNNING of grain may be likened to railroading on a single-track, conveyor belts being the tracks and garners above elevating legs being sidings.

The distribution of grain in most elevators is decided by the elevator man in charge on the ground floor, but to get the grain to its final destination without losing time or tying up of equipment is the duty of the elevator head weighman. He must know and fully understand the time elements involved in handling grain. He must also know the rate of elevation on all legs and the capacities of all garners and the length of time it will take to fill them up. He must balance this knowledge with the length of time it will take to convey a parcel of grain he wishes to send in the same direction as the grain being held in a garner was being sent at the time it was "side-tracked."

Of course it is impossible with so many grades and types of grain to always have grain so placed that at no time will it be necessary to wish to send two different types of grain in the same direction at the same time. Elevator operation simply is not quite so tractable.

Only 20 Seconds Between Draughts

THERE is also another point of fine timing in grain handling. That is met with at the time large shipments are being made, such as full cargoes, when it is desired to reach an elevator's full shipping capacity.

To control and facilitate this operation the more modern elevator has installed ammeters located in the foreman's office which are connected directly to the motors operating the shipping legs. By reading these ammeters, which show the amount of power being used, and by calibra-

If you want to see

REAL ACTION

in the business of de-ratting—simply apply

Larvacide
CHLORPICRIN

in light, economical dosage* on Saturday after closing time. Then—for Sunday morning, date yourself up with the operating ends of the broom and shovel. You'll be very busy sweeping 'em up for disposal.

Larvacide follows rats into their hiding places and, whiffing this powerful killing gas, they come swarming out to die on the open floor—without carcass nuisance.

Write for literature telling What every Operator ought to know about Effective De-ratting.

**1 to 1½ pints per 1,000 sq. ft. of floor space in reasonably tight buildings.*

Use Larvacide in specified dosage for Insect Control. Toxic to all Seed and Warehouse insects. Kills include larvae and egg life. Apply when receiving or in turning.

Larvacide is packaged in cylinders of 25, 50, 100 and 180 lbs., also handy 1-lb. Dispenser Bottles, in sealed cans, one dozen to case. Stocked in major cities.

WHAT
HAPPENS
TO
RATS?



WHEN THIS
EXTRA ORDINARY
FUMIGANT IS USED
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tions made visually, in practice the leg loads can be readily adjusted to full capacity. After this the only adjustment needed is to provide the shipping weighman with a sufficient space of time to allow him to close his garner, balance his scale, and open the scale valve—which allows the weighed grain to run out to a shipping bin.

While the scale is emptying itself grain for the next draught has been gathering in the garner, and this is the quantity on which an adjustment must be made to provide the space of time required by the weighman to close his garner, balance his scale and open his scale valve.

We have found that about 8,000 lbs. or 133 bushels gives the right margin of time, which quantity—when being elevated at the rate of 25,000 bushels per hour—will reach the scale in just 20 seconds. Therefore, 20 seconds will be the elapsed time between the finishing of one draught running to a vessel and the commencement of the next following draught. The operation of shipping grain at great speeds, therefore, becomes a very finely timed and coordinated piece of work.

Ammeters Signal Emptied Bins

THE ammeters referred to in the foregoing are also great time savers, inasmuch as it is unnecessary for basement men to be continually patrolling their shipping belts to be constantly watching for bins to run empty. The moment a bin has emptied itself the portion of the leg load it represented on the ammeters will go off immediately and a lighter load will be shown. The belt tenders remaining near a telephone are immediately informed on which leg a bin has run empty and are given another bin to open, thus controlling the leg loads and keeping them constant.

We have become accustomed to talk in bushels per hour, and it is not until we convert our bushels into tons that we realize the enormous volume being elevated at our plant with our two shipping legs each of 25,000 bushels per hour capacity. We elevate 1,500 short tons per hour, and 1,500 tons represents a very great weight being lifted in a straight upwards direction for a distance of about 230 feet in just one hour.

There are many other features in a modern elevator which one could speak about and the following are some of them.

Individual Drives Lower Power Peaks

INDIVIDUAL drives for each piece of machinery are important. The individual drive is a great wear and tear saver for it means a piece of machinery is not caused to run unless there be actual work for it to do. Also the individual drive permits an elevator to operate on a much lower power peak because with the installation of such drives a power peak can be so much more readily controlled.

Motors in modern elevators are of the high torque, synchronous type. Perhaps it might be well to explain what the term "high torque" means.

In each gear reducer, which is hooked in between a leg motor and the shaft of a head pulley, there is a piece of mechanism called a backstop. This will not permit the leg to run backwards while under full load should the power be cut off for one reason or another.

You may well imagine what would happen to a leg under full load if the power should be cut off and there were no backstop to keep it from running backwards. There would be upwards of three and a quarter tons of grain to shovel out of the leg boot. Besides considerable damage would be done to the many elevator buckets—which are worth about \$1.00 a piece—not to mention a considerable amount of time lost in making the leg ready to run again. This is where the high torque motor plus the backstop in the gear reducer proves their very great value.

Must Go To Head Floor To Start Motors

HIGH torque motors are connected to line starters, that is to starters which are connected direct to a plant's voltage—which in Fort Williams is 550 volts. By pressing the line starters' starter button the full energy of 550 volts is directed to the standing motor, and this tremendous shock is capable of starting in motion from a standing position a leg under a full load.

This performance can be likened to nothing better than to imagine a motorist or a locomotive engineer being able to start their machine from zero miles per hour and reach 60 miles per hour, instantaneously.

Modern motors are also thermostatically controlled to protect them against over-loading and to prevent them from burning out should the voltage drop, or for any other reason. This is a very great feature in a grain elevator where fires and explosions must always be guarded against.

Another feature of modern elevator operation which is worthy of mention is the fact that to start all motors situated on the head floor of an elevator it is necessary to go to the head floor to do so. This is for the purpose of survey and to ascertain if there be a reason why they should not be started, which is a safety precaution. In a case of trouble, however, every motor located on the head floor can be stopped by stop buttons which are located on the scale floor, and this means a leg may be stopped very quickly or before much damage to it could occur.

Garner Alarms And Electrical Belt Interlocks

ALSO on the scale floor there are garner alarms and garner lights hooked together in parallel for every garner in an elevator. Should a garner become blocked the garner alarm will sound and also light up its light, which readily shows at a glance which garner is in trouble. There again the stop buttons situated on the scale floor are very strategically placed.

A short description of another fine feature in modern elevator construction might be of interest and that is a system of electrical interlocks between all conveyor belts and the legs which serve them.

You will quickly recognize what an enormous pile up of grain would occur in the basement of an elevator if a leg elevating grain from a series of conveyor belts were to stop and the conveyor belts did not. If such a stream were running at the rate of 25,000 bushels per hour, over 400 bushels would pile up in a minute if a leg supposed to be elevating it had stopped. To avoid such messes and the futile labor of hand shovelling such large quantities of bulk grain, the modern elevator has a system of electrical interlocks which controls its belt systems.

The moment a leg motor stops, the interlock between it and the motors driving the conveying belts carrying the grain to it will stop also. Thus nothing but a small pile up of grain at the bin bottom valves occurs, and what little quantity which does run out onto the belts and the floor immediately chokes itself up to the bin valves, requiring only a trifling amount of labor to clean it up.

Clean Grain for Dockage Obtained

TERMINAL elevators handle grain very cheaply. We think grain is one of the cheapest handled of all bulk commodities, and therefore perhaps a word about the economic side

of the business might prove of interest.

The tariff storage charge for storing wheat is presently 1/45 of a cent per bushel per day after 15 days of free storage, or 2/3rds of a cent per bushel per month after the expiration of the free storage period. This represents a reduction in storage charges, as the storage rate was 1/30th of a cent per bushel per day or 1 full cent per bushel per month.

The tariff elevating charges on wheat are 1¼ cents per bushel, or about 43½ cents per short ton, which must be considered a very modest rate when compared to the costs of handling other bulk commodities. For this rate of 1¼ cents grain must be handled, or elevated, at least twice and in some cases three times. The two certain elevations for the return of 1¼ cents per bushel are from box car to storage and from storage to vessel or box car, which earns 21½ cents per ton per handle.

The third handle is when grain requires cleaning—and that means nearly all the grain an elevator handles. This is governed by another tariff, and while cleaning charges do produce some revenue to an elevator, yet not as much as might be thought to be the case. This is because there is no cleaning charge assessed for cleaning grain until the dockage amounts to 3% or over. In some years the dockages contained in all wheat unloaded into the local terminals does not average higher than 2%.

In cases where there is a cleaning charge assessed, all by-products removed from the grain, less one half of one percent, are returned to the producer. In cases where the dockages are 2½% and lower the grain is cleaned by the elevator free of charge, but the by-products removed become the property of the elevator for the service rendered in removing them. The revenue from such cleaning is governed entirely by the market value of the by-products when sold.

PILLSBURY TERMINAL COMPLETED

The million bushel terminal elevator started over a year ago at Clinton, Iowa, by Pillsbury Mills of Minneapolis, has been completed and is taking in soybeans for processing in its adjoining extraction plant. The crushing schedule calls for 24-hour a day operation, seven days a week.

Local and nearby football teams, supervised by their respective coaches, helped complete the project after labor shortages forced a prolonged shutdown.

WIEDLOCHER BURNS OUT

Naturally you have heard of our disastrous \$300,000 fire here Dec. 30th which wiped out everything in our milling institution except a warehouse. The 125 ft. high elevator is entirely gone, as well as our 3-story blending plant and over 10,000 sacks of feed. We have nothing left except the ground and foundation walls.

We will rebuild and be back in business, but you know what the shortage of building materials is and the length of time it takes to get machinery, and that time runs over a period of many months to a year.—Paul E. Blodget, Plant Superintendent, Wiedlocher & Sons, Springfield, Ill. [Mr. Blodget will be remembered as having been Plant Manager for the Arcady Farms Milling Co. at North Kansas City, Mo., and as Assistant Plant Manager for the same company at Chicago.]

ANOTHER FLOUR MILL BURNS

A \$100,000 loss was caused by fire which destroyed the flour mill, elevator, and warehouse of the Columbia River Milling Co. at Wilbur, Wash., on Jan. 7.

FIRE DESTROYS FLOUR MILL

Spontaneous combustion of cod-liver oil soaked burlap bags is credited with starting a fire in the Berlin Milling Co.'s properties at Berlin, Md., which resulted in a \$200,000 loss.

MINNEAPOLIS TERMINAL BURNS

The 500,000 bu Atlantic Elevator Co.'s terminal in north Minneapolis was consumed by an early Christmas morning fire. One of the oldest houses in the Twin Cities, a large quantity of wheat and barley helped swell the \$500,000 reported loss figure.

LAKE SHIPPING SETS RECORD

Grain shipments on the Great Lakes from Lake Superior and Lake Michigan ports totaled 682,912,177 bu. during the 1945 season—the largest in history. The 1944 movement was eclipsed by approximately 100 million bushels.

Wheat shipments of 493,942,070 bu. established a record, and the movement of oats topped the 100,000,000 bu. mark for the first time. The oats went chiefly to New England states to relieve animal feed shortages, while most of the wheat was sent to Europe.

Boats of Canadian registry handled 311,228,532 bu. and American owned vessels hauled 371,683,645 bu.

MILTON MARTIN DIES

Milton N. Martin, General Superintendent of Vitality Mills' plant at Chicago, died very unexpectedly of a heart attack on Dec. 29th. While a very young man, he had planned to retire to the family farm in north-eastern Indiana. He was an active member of the Chicago SOGES Chapter, and had served as a Director. Jerry Meliere succeeds Milton.

CLEVER PRIZES

At the annual Chicago SOGES Chapter "Associates Night" dinner some clever prizes were given for the:

1. First Super to sign the register; Harry E. Erickson, Lauhoff Grain Co., Danville, Ill.

2. Super from the greatest distance; Messrs. Erickson and Peterson, Lauhoff Grain Co., Danville.

3. Sixteenth person to shake hands with one of the Committee; Paul Naehner, B. F. Gump Co.

4. Person guessing closest to the time a hidden alarm clock would ring; Frank Stafford, R. A. Gerstenberg & Co.

5. Longest names; Phil Grotevant, S. Howes Co., Silver Creek, N. Y.; Leon Chevallet, Spencer Kellogg & Sons, Inc.

6. Lowest numbered paid-up membership card; E. R. Anderson, Norris Grain Co. (No. 8).

7. Fattest man; (1) Walter Myers of Stratton Grain Co., Schneider, Ind.; (2) Russell B. Maas, Screw Conveyor Corp., Hammond, Ind., and (3) Bill Gassler, Rosenbaum Bros.

8. Tallest man; (1) Emil Buelens, The Glidden Co.; (2) Harry Hanson, The Glidden Co.; (3) Russell B. Maas, Screw Conveyor Corp., Hammond.

9. Smallest shoe size; (1) Bill Hamilton, Richardson Scale Co.; (2) Marshall George, B. I. Weller Co.

10. Loudest necktie; Harry Zimmer, Bonded Exterminators.

11. Smallest shirt size; Jim McConnell, Screw Conveyor Corp., Hammond.

12. Best singer; Douglas Dyer, American Miller; Ed Escher, Screw Conveyor Corp., Hammond.

13. Biggest liar. Contestants included: A. D. McPherson, Huntley Mfg. Co., Brockton, N. Y.; Jim McConnell, Ed Escher, and Russell B. Maas, Screw Conveyor Corp., Hammond; Lloyd Forsell, Albert Schwill & Co.; Charles E. Harbin, Underwriters' Grain Ass'n, and Charles Adams, Better Methods Industrial Engineering Co. "Mac" McPherson got the first award, though there were others.



A VOLCANO IS A **GENTLEMAN** COMPARED WITH A DUST EXPLOSION

. . . it rumbles and grumbles before it erupts; signifies its intentions. But a Dust Explosion! Crash! Bang!! And there it is! Flames, fumes, tottering walls . . . no advance "tip-off."

Dust explosion hazards can be minimized, however, with **ROBERTSON SAFETY VENTILATORS**.

Here's how. Nine out of every ten Dust Explosions originate in elevator *leg*. Disperse the blast and there can be little or *no destruction*.

And that's precisely what Robertson Safety Ventilators do, effectively . . . *economically*, too, venting dangerous suspended fine dust continuously by gravity action; no operating cost.

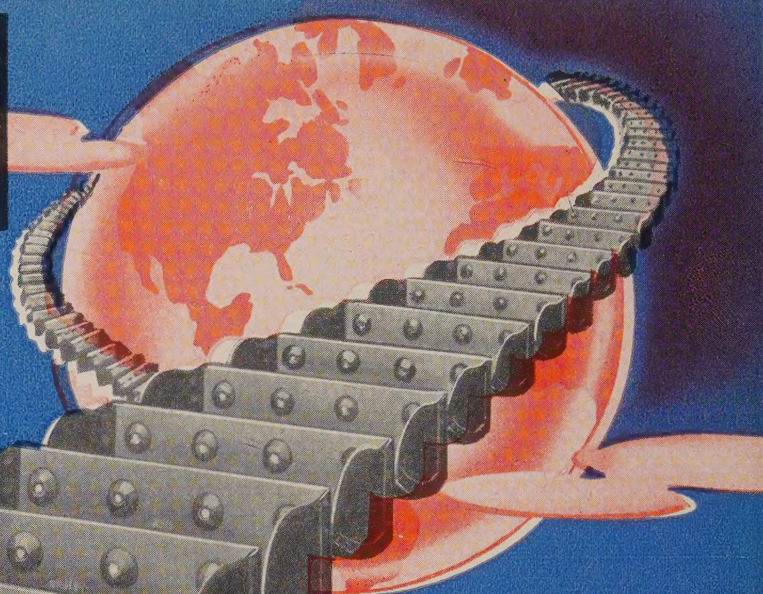
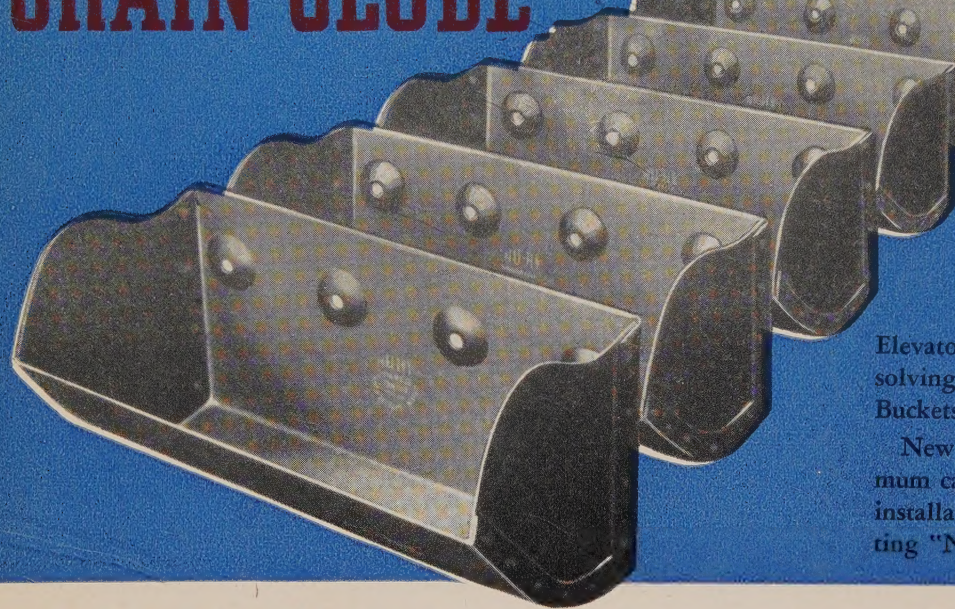
For argument's sake, suppose an explosion should start. It is routed out *through* your Robertson vent, which has a safety top, instead of ripping up the building with primary and *secondary* explosions.

For dependable *protection* and downright *peace of mind*, investigate. Write for descriptive literature.

H. H. **ROBERTSON** CO.

THE Nu-Hy
GRAIN BUCKET
PATENTED AND TRADE MARK REG. U.S. PAT. OFF.

GIRDLES THE GRAIN GLOBE



**CAPACITY-EFFICIENCY
ENGINEERING**

Thousands of Installations

Elevator and Mill Operators all over the world are solving their operating problems with "Nu-Hy" Buckets.

New installations with "Nu-Hy's" provide maximum capacity and efficiency at minimum cost. Old installations are appreciably improved by substituting "Nu-Hy's".

FIX THESE "NU-HY" FEATURES IN YOUR MIND'S EYE!



1 The high lip (high front) is scientifically positioned to scoop up a full load . . . retain it and avoid premature discharge at head pulley.

2 The high ends (high sides) prevent side spillage in up leg and over head pulley . . . shaped to fit contour of adjoining buckets, also permits continuous spacing if desired.

3 The bolt hole position avoids "hinging" action when bucket passes over boot and head pulleys . . . directs pick-up and discharge. Bolt hole indentations act as lock nut, embed belt and bolt head, thus improve belt traction.

For more than a decade Screw Conveyor Corporation engineers have constantly striven to make the handling of bulk materials more efficient. Their work has been "A March of Progress" in conveying. You can safely entrust your problems to "men who know". Send for Bulletin 1242 and see the many outstanding developments we have to offer.

Side View of Buckets
showing continuous
spacing and indented
bolt holes.



Nu-Type
FLOUR MILL BUCKET
PATENTED AND TRADE MARK REG. U.S. PAT. OFF.

**for elevating flour and similar
soft stocks**

This bucket eliminates the difficulties that have plagued millers and other processors for years. No other elevator bucket does, or can give the capacity efficiencies achieved by the "Nu-Type".

Its patented side vents eliminate trapped air during pick-up, and vacuum packing during discharge. The shelf bottom, combined with the high sweeping sides permit maximum carrying capacity . . . no blowing or aerating. Specify "Nu-Types" . . . there are no substitutes. Guaranteed recommendations on request.

(The venting of buckets is an exclusive Screw Conveyor Corp. patent in the U. S., Canada and several foreign countries.)

Screw Conveyor Corporation

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ENGINEERS

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PRODUCTS**

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